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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/606,360 | 06/26/2003 | Yukio Tokunaga | 46287 | 4538 |

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MANELLI DENISON & SELTER
2000 M STREET NW SUITE 700
WASHINGTON, DC 20036-3307

EXAMINER

JOLLEY, KIRSTEN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1762

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 01/19/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/606,360

Applicant(s)

TOKUNAGA ET AL.

Examiner

Kirsten C. Jolley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8-14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8-14,16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/230,995.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 8-14, and 16-17 are pending.
2. The 35 USC 103(a) rejections over Ohya et al. made in the final Office action have been withdrawn in response to Applicant's filing of a certified English translation of the priority document provided after-final on October 24, 2006, and in response to Applicant's cancellation of claims 2-7, 15, and 18-20 in the after-final amendment of December 19, 2006.
3. However, upon further consideration of the prior art disclosed in Applicant's specification, specifically JP 2000-263926 A, new rejections of the claims over Kaneko et al. taken in view of JP 2000-263926 A are set forth below. Accordingly, this action is made non-final.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 8-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US 2001/0014381) taken in view of JP 2000-263926 A.

Kaneko et al. discloses a process for preparing an ink-jet recording material having a water-resistant polyolefin resin-coated paper support and at least one ink-receptive layer provided on the support, the ink-receptive layer containing inorganic fine particles having an

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average primary particle size of 30 nm or less and a hydrophilic binder (paragraphs 0011 and 0124). Kaneko et al. lacks a teaching of cutting the material, before printing, such that a longitudinal direction of the ink-jet recording material is at a right angle to a flowing direction of the recording material at a time of coating the ink-receptive layer.

JP '926 is cited for its teaching of improved printer traversal/performance of its ink-jet recording material product, given a paper's desired thickness and stiffness, when the paper is cut and fed into a printer in a direction which is at a right angle to the coating flow direction. While JP '926 ink-jet recording material has a structure different than Kaneko et al. (i.e., a recording layer containing inorganic particles is an undercoat and a gloss layer is provided as a topcoat), both JP '926 and Kaneko et al. are similarly directed to the manufacture of ink-jet recording materials having high quality and photograph-like high gloss. It is the Examiner's position that it would have been obvious for one having ordinary skill in the art, upon seeing the prior art of JP '926, to have cut Kaneko et al.'s recording material product in a direction at a right angle to the coating flow direction with the expectation of improved printer performance, and with the expectation of successful results since the references are similarly related to the production of photo-like glossy ink-jet recording materials.

As to claims 8-9, the inorganic fine particles are contained in the ink-receptive layer in an amount of 50% or 60% by weight or more (paragraph 0013).

As to claims 10-11, the ink-receptive layer contains inorganic fine particles in an amount of 10-30 g/m² or more (paragraph 0012).

As to claim 12, Kaneko et al. is silent with regard to the average secondary particle size of inorganic fine particles. It is the Examiner's position that it would have been obvious for one

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having ordinary skill in the art to have optimized particle sizes through routine experimentation depending upon the desired product qualities in the absence of a showing of criticality.

As to claim 13, the inorganic fine particles are fumed silica (paragraph 0011).

As to claim 14, the weight ratio of hydrophilic binder to inorganic fine particles is less than 0.4 (see Example 1).

As to claims 16-17, the hardener of the hydrophilic binder may be boric acid or a borate (paragraph 0018).


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj

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